

## TIGP Bio 2021 Fall Syllabus Seminar

For the latest syllabus, please visit <https://tigpbp.iis.sinica.edu.tw/tigpbio/index.html>

**Place:** Room 101, New Building of the Institute of Information Science, Academia Sinica.  
**Time:** Thursday 14:00-15:20  
**Chair:** Dr. Chung-Yen Lin (Informatics), Dr. Chien-Ling Lin (Biology), Dr. Wei-Chung Liu (Statistics)  
**Remarks:** Attend any 2 non-BP Seminars (either on campus or off campus is fine) and submit a seminar report for each seminar to advisor/lab professor (Format: 1 page A4, 12pts font, single space) and send the report to BP office after grading is completed by the professor by the end of the semester. Form: [TIGP-BP Seminar Student Report](#)  
**Grades:** Attendance 100% (non-BP seminar included)

Week	Date	Topics/Brief Description	Speaker's Affiliation	Speaker	Host
1	2021/9/16 Moved to 10/14	--	--	--	--
2	2021/9/23 <a href="#">@Webex</a>	Deep-learning-based Speech Enhancement with Its Application to Assistive Oral Communications Devices	Research Center for Information Technology Innovation, Academia Sinica	<a href="#">Dr. Yu Tsao</a>	Hsin-Han Lee
3	2021/9/30 <a href="#">@Webex</a>	Leverage Immuno-Pharmaco-Genomics and Single-Cell Analysis for Translational Studies in Immune-Mediated Diseases and Immunotherapies	Institute of Bioinformatics and Systems Biology, National Yang Ming Chiao Tung University	<a href="#">Dr. Tai-Ming Ko</a>	Yu-Hsin Chen
4	2021/10/7 <a href="#">@Webex</a>	Large-scale Data Analysis for Robotic Yeast One-hybrid Platforms and Multi-disciplinary Studies Using Gatemultiplex	Department of Life Science, National Taiwan University	<a href="#">Dr. Ying-Chung Jimmy Lin</a>	Yu-Ching Hsu
5	2021/10/14 (Moved from 9/16)	Noises and Dynamics in Cells: Mathematical Modeling in Systems Biology.	Institute of Chemistry, Academia Sinica	<a href="#">Dr. Chao-Ping Hsu</a>	Yu-Chun Huang
6	2021/10/21 <a href="#">@Webex</a>	Bioinformatics, Big Data, and Deep Learning: Multifaceted Perspectives for Cancer Research	Graduate Institute of Biomedical Electronics and Bioinformatics, National Taiwan University	<a href="#">Dr. Eric Y. Chuang</a>	Yueh-Hua Tu
7	2021/10/28	Review Week (No class)	--	--	--
8	2021/11/4	Midterm Exam (No class)	--	--	--

9	2021/11/11	Giant Viruses of Eukaryotes: what are they and why are they so giant?	Institute of Plant and Microbial Biology, Academia Sinica	<a href="#">Dr. Chuan Ku</a>	Jia-Ying Su
10	2021/11/18	Transcriptomic Sequence Variation Analysis Reveals Markers, Chromosomal Deletions, and Chimerism of Cavendish Banana Tissue Culture-Generated Cultivars Tolerate to Fusarium Wilt TR4	Agricultural Biotechnology Research Center, Academia Sinica	<a href="#">Dr. Ho-Ming Chen</a>	David Nicola Streuli
11	2021/11/25	Mechanism and Modeling of Human Disease-Associated Near-Exon Intronic Variants that Perturb RNA Splicing	Institute of Molecular Biology, Academia Sinica	<a href="#">Dr. Chien-Ling Lin</a>	Po-Yuan Chen
12	2021/12/2	Novel Schizophrenia Drug Discovery to Neurodegenerative Disease Treatment - an AI Aided Drug Discovery and Development Case	Department of Computer Science and Information Engineering, National Taiwan University	<a href="#">Dr. Yu-feng Jane Tseng</a>	Tzu-Hsiang Lin
13	2021/12/9	How Does the Brain Represent Multidimensional Information of Environments, and How Could It Be Learned?	Institute of Biomedical Sciences, Academia Sinica	<a href="#">Dr. Ching-Lung Hsu</a>	Hsin-Ju Hung
14	2021/12/16 <a href="#">@Webex</a>	From Network Positions, their Importance and Uniqueness, to Biodiversity	Institute of Statistical Science Academia Sinica	<a href="#">Dr. Wei-Chung Liu</a>	Rodrigo Espinoza Silva
15	2021/12/23	Review Week (No class)	--	--	--
16	2021/12/30	Final Exam (No class)	--	--	--